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Epidemiological study on short and long-term weight loss with improvement of metabolic control in obese diabetic patients with a standardized multidisciplinary weight loss program (DIAMEX Study).

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Abstract

Purpose of Study: Obesity in Mexico has risen since the 1980s affecting 30% of the adult population, and 15% of adults had diabetes in Mexico. The rise in the rates of obesity and diabetes is linked to an increased consumption of calorically dense foods and sedentary lifestyle. The present study (DIAMEX) was aimed to evaluate the effect of a VLCK diet as part of a commercial weight loss program (PnKDiaprokal®) in patients with Diabetes and Obesity. It is an epidemiological study on weight loss and improvement of metabolic control in obese diabetic patients with a standardized multidisciplinary program that includes diet, physical exercise, and emotional support.

Methods: A prospective study was conducted on patients diagnosed with Overweight, Obesity, plus Diabetes or Prediabetes between July/2019 through March/2020 in Mexico.

Results: 73 patients were included, 46 Females (63.01%), 27 Males (36.99%). From the 73 patients, 34 (46.6%) have T2DM, 39 (53.4%) Prediabetes, 17 (23.28%) Overweight and 56 (76.71%) Obesity. 12 patients (16.4%) completed more than 6 months in the study. Significant result in the 12 subjects was BMI change from 37.58 to 34.14 ($p= 0.000521$), WC from 113.70 cm to 105.04 cm ($p= 0.001686209$), and minor change in HbA1c from 7.08% to 6% ($p= 0.450419926$).

Conclusions: The current study demonstrates that the use of a Nutritional Plan (VLCK diet) can assist in the management to improve the metabolic condition from patients with obesity and diabetes, the study proves the importance to use Lifestyle Modification as a part of Obesity and Diabetes Treatment.

Keywords: Obesity, Overweight, Diabetes, Prediabetes, Nutritional Plan - VLCK diet

Abbreviations: VLCK diet = Very Low-Carbohydrate Ketogenic diet, BMI = Body Mass Index, WC = Waist Circumference, T2DM = Type 2 Diabetes Mellitus

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